

CLAIMS

What is claimed is:

1. A method of making a confectionery, comprising: heating a bob syrup comprising water, a sugar, and a humectant; adding a component containing fat to the heated bob syrup; adding a hydrocolloid to the heated bob syrup; and mixing the bob syrup with added fat component and hydrocolloid, wherein the amount of hydrocolloid added results in a water activity of the final confectionery of below 0.6, and wherein the final solids content is about 80 to 90% total solids by weight.
2. The method of claim 1, wherein carrageenan is added as the hydrocolloid.
3. The method of claim 1, wherein the component containing fat comprises one or more of milk powder, milkfat, reduced-fat cocoa powder, a fat replacer, cocoa powder, vegetable fat, cocoa butter alternative, and cocoa butter.
4. The method of claim 3, wherein the component comprising fat comprises cocoa butter.
5. The method of claim 1, wherein the humectant comprises glycerol and sorbitol.
6. The method of claim 1, wherein the component containing fat comprises one or more of dark chocolate, milk chocolate, bittersweet chocolate, semisweet chocolate, white chocolate, chocolate liquor, and peanut butter.
7. The method of claim 1, wherein the component containing fat further comprises protein.
8. The method of claim 1, wherein the water activity of the final confectionery is between 0.4 and 0.6.

9. The method of claim 1, wherein the moisture content of the final confectionery is between about 5 to about 15 % by weight.
10. The method of claim 1, wherein the moisture content of the heated bob syrup is between about 10 to about 25 % by weight.
11. The method of claim 1, wherein the fat content of the final confectionery is between about 10 to about 15 % by weight.
12. The method of claim 1, wherein the fat content of the final confectionery is between about 5 to about 40 % by weight.
13. The method of claim 1, wherein the fat content of the final confectionery is between about 5 to about 7 % by weight.
14. The method of claim 1, further comprising adding calcium.
15. The method of claim 14, wherein the calcium is in the form of calcium carbonate.
16. The method of claim 15, wherein calcium carbonate is added to result in a final concentration of about 1 to about 10 % by weight.
17. The method of claim 16, wherein the final concentration of calcium carbonate is about 5 to about 8 % by weight.
18. The method of claim 1, wherein the hydrocolloid is one or more of hydroxypropyl methylcellulose, gelatin, carrageenan, gum arabic, carboxymethyl cellulose, methyl cellulose, hydroxypropyl cellulose, locust bean gum, guar gum, pectin, xanthan, starch, maltodextrin, gum ghatti, gum karaya, gum tragacanth, dextran, konjac flour, aribinogalactan, gellan gum, agar-agar, furcellaran, and alginate.

19. A method of making a confectionery, comprising: heating a bob syrup comprising water, a sugar, and a humectant; adding a component containing fat to the heated bob syrup; adding an emulsifier to the heated bob syrup; and mixing the bob syrup with added fat component and hydrocolloid, wherein the amount of emulsifier added results in a water activity of the final confectionery of below 0.6, and wherein the final solids content is about 80 to 90% total solids by weight.
20. The method of claim 19, wherein lecithin is added as the emulsifier.
21. The method of claim 19, wherein the component containing fat comprises one or more of milk powder, milkfat, reduced-fat cocoa powder, a fat replacer, cocoa powder, vegetable fat, cocoa butter alternative, and cocoa butter.
22. The method of claim 21, wherein the component comprising fat comprises cocoa butter.
23. The method of claim 19, wherein the humectant comprises glycerol and sorbitol.
24. The method of claim 19, wherein the component containing fat comprises one or more of dark chocolate, milk chocolate, bittersweet chocolate, semisweet chocolate, white chocolate, chocolate liquor, and peanut butter.
25. The method of claim 19, wherein the component containing fat further comprises protein.
26. The method of claim 19, wherein the water activity of the final confectionery is between 0.4 and 0.6.
27. The method of claim 19, wherein the moisture content of the final confectionery is between about 5 to about 15 % by weight.
28. The method of claim 19, wherein the moisture content of the heated bob syrup is between about 5 to about 25 % by weight.

29. The method of claim 19, wherein the fat content of the final confectionery is between about 5 to about 15 % by weight.
30. The method of claim 19, wherein the fat content of the final confectionery is between about 5 to about 40 % by weight.
31. The method of claim 19, wherein the fat content of the final confectionery is between about 5 to about 7 % by weight.
32. The method of claim 19, further comprising adding calcium.
33. The method of claim 32, wherein the calcium is in the form of calcium carbonate.
34. The method of claim 33, wherein calcium carbonate is added to result in a final concentration of about 1 to about 10 % by weight.
35. The method of claim 34, wherein the final concentration of calcium carbonate is about 5 to about 8 % by weight.
36. The method of claim 19, wherein the emulsifier is one or more of hydroxylated lecithin, polyglycerol ester, and distilled monoglyceride.
37. A method of making a confectionery, comprising: forming a first component by: combining water, at least one humectant, sugar, and at least one corn syrup to form a bob syrup mixture; heating the mixture to above 170°F; adding a hydrocolloid or emulsifier to the heated mixture; and continuing to heat the mixture until a solids content of about 80-90 wt.% is obtained; forming a second component by combining a fat and a flavoring; and mixing the first component and the second component at a temperature above the melting point of the fat to form a mixture.

38. The method according to claim 37, wherein the hydrocolloid is selected from the group consisting of hydroxypropyl methylcellulose, gelatin, carrageenan, gum arabic, carboxymethyl cellulose, methyl cellulose, hydroxypropyl cellulose, locust bean gum, guar gum, pectin, xanthan, starch, maltodextrin, gum ghatti, gum karaya, gum tragacanth, dextran, konjac flour, aribinogalactan, gellan gum, agar-agar, furcellaran, and alginate.
39. The method according to claim 37, wherein the hydrocolloid is carrageenan.
40. The method according to claim 37, wherein the at least one humectant is glycerol, sorbitol, mannitol, xylitol, maltitol, hydrogenated starch hydrolysate, lactitol, isomalt, and erythritol.
41. The method according to claim 37, further comprising milling the second component to an average particle size below 50 microns prior to the mixing step.
42. The method according to claim 37, wherein the fat is an animal fat, a milkfat, or a vegetable fat.
43. The method according to claim 37, wherein the second component comprises a fat replacer or cocoa butter.
44. The method according to claim 37, wherein the second component comprises at least one of dark chocolate, milk chocolate, bittersweet chocolate, semisweet chocolate, white chocolate, chocolate liquor, or peanut butter.
45. The method according to claim 37, wherein the second component further comprises a protein.
46. The method according to claim 45, wherein the protein is milk protein or soy protein.

47. The method according to claim 37, wherein the second component comprises chocolate or confectionery peanut butter.
48. The method according to claim 37, wherein a ratio of the first component to the second component is about 40:60 to about 60:40.
49. The method according to claim 48, wherein the ratio is about 48:52 to about 52:48.
50. The method according to claim 37, wherein the emulsifier is one or more of lecithin, hydroxylated lecithin, polyglycerol ester, and distilled monoglyceride.
51. The method according to claim 50, wherein the emulsifier is lecithin.
52. A confectionery produced according to the method of claim 1.
53. The confectionery according to claim 52, wherein a water activity varies by no more than ± 0.05 over six months storage at room temperature.
54. The confectionery according to claim 53, wherein the water activity varies by no more than ± 0.02 over six months storage at room temperature.
55. The confectionery according to claim 52 having a water activity of less than about 0.6.
56. The confectionery product according to claim 55, wherein the water activity is between about 0.4 and about 0.6.
57. The confectionery according to claim 31, having a calcium content of about 1 to about 15%.
58. The confectionery of claim 52, having a fat content of less than 20%.
59. The confectionery of claim 52, having a fat content of less than 15%.

60. A confectionery produced according to the method of claim 37.
61. The confectionery according to claim 60, wherein a water activity varies by no more than ± 0.05 over six months storage at room temperature.
62. The confectionery according to claim 60, wherein the water activity varies by no more than ± 0.02 over six months storage at room temperature.
63. The confectionery according to claim 60, having a water activity of less than about 0.6.
64. The confectionery product according to claim 63, wherein the water activity is between about 0.4 and about 0.6.
65. The confectionery according to claim 60, having a calcium content of about 1 to about 15%.
66. The confectionery of claim 60, having a fat content below 20%.
67. The confectionery of claim 60, having a fact content below 15%.
68. A product comprising a confectionery or confectionery ingredient comprising about 5 to about 10 wt.% water as added water, about 0.3 to about 0.5 wt.% of a hydrocolloid, about 10 to about 20 wt.% sucrose, about 10 to about 20 wt.% dextrose, about 2 to about 5 wt.% sorbitol syrup, about 10 to about 15 wt.% glycerine, about 25 to about 35 wt.% high maltose corn syrup, about 0.1 to about 0.2 wt.% of an emulsifier, about 1 to about 15 wt.% calcium carbonate, and about 1 wt.% salt,

wherein the confectionery or confectionery ingredient displays less than ± 0.05 change in the water activity level after room temperature storage for at least six months.
69. The product of claim 68, wherein the hydrocolloid is a carrageenan.

70. The product of claim 68, wherein the emulsifier is a lecithin, hydroxylated lecithin, or fractionated lecithin.
71. The product of claim 68, wherein the initial water activity is between about 0.4 to about 0.6.
72. The product of claim 68, wherein calcium carbonate is present at about 6 to about 9 wt.%.
73. The product of claim 68, wherein added water is present at about 8 to about 10 wt.%.
74. The product of claim 68, wherein sucrose is present at about 15 to about 20 wt.%.
75. The product of claim 68, wherein sorbitol syrup and glycerine combined are present at about 15 to about 20 wt.%.
76. The product of claim 68, wherein high maltose corn syrup is present at about 25 to about 30 wt.%.
77. The product of claim 69, wherein the hydrocolloid is present at about 0.4 wt.%.
78. The product of claim 70, wherein the emulsifier is present at about 0.11 to about 0.14 wt.%.
79. The product of claim 68, comprising a fat reducer or modified fat.
80. The product of claim 68, comprising cocoa.